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MONTANA DNRC Conversation

A Newsletter of the Department of Natural Resources and Conservation • Director Bud Clinch
Summer 2003

# —INITIAL ATTACK—

## DNRC Wildland Fire Programs

The Fire and Aviation Management Bureau, headquartered in Missoula and part of DNRC's Forestry Division, administers the State of Montana's wildland fire programs. Together with staff from the six land offices around the state, the bureau's responsibilities include fire prevention and protection, firefighter training, coordinating and assisting rural and volunteer fire organizations, equipment development, and aviation. The most dramatic part is fire suppression.

DNRC provides direct fire protection on 5.2 million acres of state, private, and federal lands. DNRC also assists all 56 counties with fire protection on 45 million acres of state and private lands, and subcontracts fire protection on 1.7 million acres of state and private lands to federal agencies.

That's an overview of the DNRC fire program at the bureau level, but what about fire suppression at the land office or unit level? That's called Initial Attack!

## Initial Attack

What is meant by "initial attack" (commonly called "IA"), when we talk about wildland fire? It is, simply, the first strike of equipment and personnel to show up on a fire. The expression sounds like a military tactic, and in many ways it's the approach that is used. The philosophy is that, if resources such as engines, water tenders, helicopters, and people arrive on the scene while the fire is still small (under 5 acres), the chances of suppressing and extinguishing the fire are excellent. In doing so, not only the natural resources are saved, but also equipment, personnel, and money.

And, DNRC initial attack crews are some of the best in the nation.

## Achievement

During the 2002 fire season, for example, IA crews kept 97 percent of the DNRC direct protection fires to a size of 10 acres or less. In fact, as evidenced by the table on the next page, over the past several years the percentage of direct protection and county assist fires kept to 10 acres or less has never been below 92 percent. Clearly, the monetary costs, and the costs in lost resources, would have been staggering, without the dedication and high level of proficiency of DNRC's initial attack crews.

Photo by Pat Cross

*Starting a back fire*

Initial Attack continued on page



*"To help ensure Montana's land and water resources provide benefits for present and future generations."*

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DNRC Direct Fire Protection and
County Assist Fires
1997 - 2002

| Fire Season | Number of Fires | Acres Burned | Fires Kept under 10 Acres | Fires Kept under 10 Acres - Direct Protection Only |
|---|---|---|---|---|
| 2002 | 322 | 28,394 | 92% | 97% |
| 2001 | 344 | 16,758 | 92% | 95% |
| 2000 | 541 | 168,792 | 94% | 93% |
| 1999 | 467 | 87,356 | 94% | 95% |
| 1998 | 374 | 36,594 | 94% | 96% |
| 1997 | 204 | 3,419 | 94% | 98% |

## Crews

What kinds of people are found in DNRC's initial attack crews? "Our firefighters believe in what they're doing, they enjoy what they're doing, and they're some of the best wildland firefighters in the state and nation," said Dan Bushnell, DNRC public information officer.

DNRC fire crews are made up, on average, of young men and women between the ages of 18 and 33. Many are college students or teachers, while others work in a variety of jobs that allow them to be firefighters during the summer. Crews are hired in February and March, but don't start work until the first week in June. The crews are finished by the end of August or the first part of September.

During the height of the season, the crews generally work from 9:00 a.m. to 6:00 p.m., so that they are available during the time of day that fire starts are most common. To avoid burnout and maintain readiness, fire team leaders and DNRC unit fire supervisors run schedules that meet the guidelines of the National Wildfire Coordinating Group (NWCG). Fourteen-day rotations are typical, depending on fire conditions and manning. Fire supervisors are stationed at DNRC's Anaconda, Clearwater, Dillon, Helena, Kalispell, Libby, Missoula, Plains, Stillwater, and Swan River Unit Offices.

An exception can be made to the NWCG guideline of a minimum ratio of one hour of rest for every two hours of work in a 24-hour period. If a fire starts and initial attack becomes the priority on the fire, crews can be authorized to work a continuous 24-hour period. The first 24-hour period is considered initial attack. After that, it becomes "extended attack," and the DNRC initial attack crew is pulled back to the home station and put back into the role of initial attack. The fire is turned over to an incident management team to manage and control.

DNRC operates 65 engine companies. An engine crew consists of two or three people. One is an engine boss, the person in charge of the engine. Next is a senior firefighter, a person who is qualified, trained, has a season or two under his or her belt — but is not yet ready to be an engine boss. The last crew member is usually a first-year firefighter. This firefighter is trained and qualified, but lacks experience. By working with experienced crew members, the first-year firefighter learns and quickly becomes more proficient, skilled, and safer at the job.

Photo by Pat Cross

*Mopping up hot spots*

## Initial Attack Stations

An initial attack station is the headquarters out of which a myriad of activities flourishes for about five months out of the year. During the summer months, there doesn't seem to be enough room. Because crews live at these stations, day in and day out, the stations have a wide array of hidden amenities that make them comfortable. For example, rather than chairs, used sofas are brought in as seating in the "lounge," or crew area. This is generally the area where the crews get briefings, fill out paperwork, and eat lunch. In addition, there is a TV/VCR that is available for training

Initial Attack continued on page 3

purposes during the workday, but is used to watch movies during the off-hours.

Where are DNRC's initial attack stations? They are scattered through the western half of the state, from the Boorman Initial Attack Station at Marion in northwestern Montana, to Garrison in the central portion, to Lima, in the southwestern corner near Monida Pass.

## Equipment

The mainstay of DNRC's fire crews is the Type 6 engine, commonly referred to as a "brush truck." It has a 200- to 300-gallon water tank mounted on it, with a pumping/siphon system integrated onto a flatbed truck body that attaches to the truck. These trucks are versatile and allow crews to travel off-road to get to the fires. DNRC crews operate Type 6 engines developed and built at the DNRC Equipment Development Center (EDC) in Missoula. According to EDC's Joe Wulfekuhle, most of the equipment and all of the engines that DNRC uses for initial attack are developed in-house, which allows EDC to tailor the equipment to fit the needs of the crews. DNRC crews also use Type 3 and Type 4 engines that are developed at EDC; these are simply larger versions of the Type 6 engines.

All the equipment is developed internally and maintained by land office mechanics, like Curt Miller at the Central Land Office (CLO) in Helena. Miller maintains a fleet of about 45 vehicles for the CLO fire and trust land fleet. He also does annual inspections, major maintenance, and replacement development for about 90 pieces of equipment over 14 counties for CLO's County Cooperation Fire Program. The Fire and Aviation Management Program loans over 350 engines and water tenders to rural and volunteer fire agencies throughout Montana, primarily in the eastern part of the state.

Another resource used by IA crews is "helitack," or helicopter attack. Helitack means using a helicopter and a small crew on board (five to seven wildland firefighters from both DNRC and the U.S. Forest Service) to fight fires. The advantage is that a helicopter can travel faster and into remote areas, allowing forces to attack a small fire quickly and efficiently. After the helicopter delivers the firefighters on-site, it will generally stay in the area and begin dumping water on the fire with a bucket, in conjunction with work being done by the helitack firefighters on the ground. This is yet another level of DNRC's IA firefighting capability.

Photo by Pat Cross

*DNRC initial attack helicopter*

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DNRC's workhorses are three Bell UH-I series type 2 helicopters (Hueys) that have been modified to become medium lift helicopters for DNRC. These 1960s-era helicopters are stationed at Kalispell, Missoula, and Helena. Two light, type 3 helicopters (Bell 206 B-III), one of which is owned by the Department of Environmental Quality, are stationed in Helena and used for firefighting or reconnaissance. In addition, DNRC maintains three fixed-wing aircraft, Cessna 180 series, that are used primarily for spotting new fires and transporting personnel.

## Training

The reason that DNRC crews are so proficient at their job is training. Training for these crews never ends; from their first day of work until the fire season is over, crews are training constantly. Crew members become competent in the use of maps, compasses, GPS units, radios, hand tools, and chain saws; off-road driving; equipment maintenance; flight safety; and basic/advanced leadership skills. DNRC unit fire supervisors are constantly challenging their crews and forcing crews, engine bosses, squad bosses, and fire team leaders to be on their toes. In addition, crews must meet all mandatory training requirements posed by the National Wildfire Coordinating Group, the national authority and regulatory agency of wildland fire suppression. An example of that mandatory training is the physical fitness test, called the "pack test." DNRC initial attack crews are required to take the "arduous" version of the test, which entails putting on a 45-lb. backpack and walking 3 miles in 45 minutes or less. In addition, crew members must have completed, at a minimum, these courses: Wildland Firefighter II, Standards of Survival, and Basic Wildland Fire Behavior. The DNRC Fire and Aviation Management Bureau and the individual unit fire supervisors mandate the remaining training that the crews receive.

In addition to DNRC training, crews across the state conduct joint training with their federal counterparts in the Forest Service, Bureau of Land Management, Fish and Wildlife Service, and Bureau of Indian Affairs, as well as in rural/volunteer/county fire departments. All this training ensures that, when the fire comes, crews from all the agencies are comfortable together, know their strengths and weaknesses, and are coordinating efficiently in suppressing the fire.

"This group of young men and women from DNRC are not highlighted often enough," commented Bushnell. "Our initial attack folks get down and dirty, they spray the water, they work the Pulaskis, and they spend endless hours away from their families, all in the name of protecting Montana's resources."

So, the next time you see a white or yellow DNRC initial attack engine or a yellow and white helicopter, give them a wave, or stop and talk!

## —DIRECTOR'S AWARD—

**Mike Justus** has won the Director's Award for Superior Achievement in Fiscal Year 2003. Mike is a service forester working out of the Libby Unit of the Northwestern Land Office.

Mike works with numerous individuals and civic and community organizations, primarily in Lincoln County, but also in Sanders, Flathead, and Lake Counties, to improve the management of community and private forests. In presenting the award, Director Bud Clinch noted that Mike's dedication and innovation have made a real difference in his community, reflected positively on DNRC, and raised the bar of performance for DNRC service foresters.

Mike was named "Inspector of the Year" by the Montana Tree Farm System for two consecutive years. An article describing that award and his numerous other accomplishments appeared in the Winter 2003 issue of *DNRConversation*.

Photo by Bill Caldwell

*Michael Justus*

# —WATER RESOURCES MERIT AWARDS—

DNRC Staff Photo

*Scott Compton receives a 25-year certificate from Administrator Jack Stults*

The Division Administrator's Award went to **Bob Arrington** and **Cindy Forgey**. Bob and Cindy were recognized for their leadership and hard work in relocating the Water Resources Division headquarters from downtown Helena to the building at 1424 Ninth Avenue.

Two Special Recognition Awards were presented. **Charlie Atkins** and **Rob Kingery** received one of these awards for their efforts at improving the condition of all the state-owned canals. The other Special Recognition Award went to **Chuck Dalby** and **Jim Robinson** for their work in completing the geomorphology study of the Upper Yellowstone River.

The Rookie of the Year Award went to **Jim Nave** for his hard work and expertise in new appropriations at the Missoula Regional Office.

Several Certificates of Appreciation were awarded to groups and teams. **Larry Dolan, Mike Roberts, Bill Uthman, Russ Levens, Tim Bryggman, Andy Brummond,** and **Scott Irvin** were recognized for their work in completing the Smith River Environmental Assessment. The Nevada Creek Team – **Bob Arrington, Jim Beck, Michelle Lemieux,** and **John Sanders** – received a Certificate of Appreciation for the assistance provided to the Rehabilitation Section in the completion of the Nevada Creek Phase I Project. Similarly, the Bair Team – **Sterling Sundheim** and **John Sanders** – received an award for their efforts in the successful completion of the Bair Dam Rehabilitation Project.

The other recipients of individual Certificates of Appreciation from the Water Resources Division are listed below in alphabetical order, along with an indication of the work that merited the award.

| | |
|---|---|
| **Andy Brummond** | Professionalism, commitment, and agricultural savvy in administering water resource programs at the Lewistown Regional Office |
| **Dolores Eustice** | Attention to detail, positive attitude, and willingness to jump in and get the job done |
| **Paula Hoyer** | Professionalism, efficiency, and dedication in providing support to the Lewistown Regional Office and the public |
| **Nancy Hughes** | Commitment and consistent, long-term excellence |
| **Kevin Smith** | Going above and beyond during a period of reduced staffing and transition in the State Water Projects Bureau |
| **Art Taylor** | Professionalism, technical expertise, and willingness to go the extra distance to complete a job |

# —FORESTRY MERIT AWARDS—

Photo by Jane Markland

*Awards ceremony and picnic in Missoula*

At an awards picnic held in Missoula on July 7, **Colin Moon**, fire supervisor for the Clearwater Unit, and **Steve Wallace**, manager of the Clearwater Unit, received the Forestry Division Administrator's Award for Fiscal Year 2003. They were honored for management of the initial attack program, administration of a National Fire Plan grant, and consolidation of fire dispatch and initial attack with the Seeley Lake Rural Fire District.

**Chris Town**, service forester at the Anaconda Unit of the Southwestern Land Office, has been awarded the 2003 Service Forester of the Year Award. In addition to his efforts in the Slash and Forest Practices Programs, Chris worked with the Headwaters RC&D to design and secure a $187,000 National Fire Plan fuel hazard reduction grant for the Georgetown Lake community and with the community of Anaconda to develop a community forestry project.

**Ed Martin**, aircraft inspector for the Aviation Section, received the Fire and Aviation Management Bureau's Award for Fiscal Year 2003 for his hard work in acquiring federal excess property helicopters and aviation parts from the U. S. military.

The 2003 Outstanding Staff Support Award for Forestry and Trust Land Management Divisions went to **Jan Wheeler**, office manager for the Southern Land Office in Billings. Jan ran the office this past year during the interim between two new area managers and has taken on additional responsibilities related to budgeting, special recreational use licenses, and fire programs.

Forestry Division also presented a number of Certificates of Appreciation. Certificate recipients are listed below in alphabetical order, along with an indication of the work that earned the award.

| | |
|---|---|
| **Ann Evans** | Efforts in the Volunteer and Rural Fire Assistance Program |
| **Norman Fortunate** | Work on the FLEP State Priority Plan |
| **Ken Gragg** | Maintenance of Missoula DNRC complex |
| **Kelley Gundale** | Efforts in the Community Forestry Program |
| **Todd Klemann** | Efforts in acquiring USFS, BLM, and other federal excess property |
| **Eric Kurtz** | Efforts in firefighter safety recognition and fire training |
| **Tony Liane** | Service as acting state forester and Forestry Division administrator, while continuing his responsibilities as area manager for the Southwestern Land Office |
| **Eric Norris** | Work on the FLEP State Priority Plan |
| **Mikell Periman** | Fire management (lookout) work |
| **Beverly Tolker** | Work on the second phase of the HRA Accounting Program |
| **Carolyn Wolf** | Work on the second phase of the HRA Accounting Program |

## —CENTRALIZED SERVICES DIVISION MERIT AWARDS—

This year, the Centralized Services Division Administrator's Award went to **Jeff Lustgraaf**, chief of the Fiscal Bureau. His commitment, perseverance, and attitude were noted in connection with the major changes that occurred within the accounting and fiscal world, along with staff reductions in the midst of an increased workload.

A Special Appreciation Award was given to **Carolyn Wolf**, an information systems specialist who works in Missoula. Carolyn served as project manager for the Hazard Reduction Agreement Phase II project. This system is the state program for tracking and enforcing proper practices for handling debris from logging activity. The Forestry Division also awarded Carolyn's efforts.

Another Special Appreciation Award was presented to **Carrie Villa** for her can-do attitude, pleasant demeanor, and willingness to help others. Carrie is an accounting technician.

**Bill Miller** received a Supervisor's Award for developing web-based training programs.

## —DNRC PUBLIC SERVICE AWARDS—

**This summer many DNRC employees are being honored for their years of service to the public. Certificates and lapel pins are awarded in recognition.**

### 30 Years

Jim Kindle, Theresa McLaughlin, Donald MacIntyre, and Robert Smith, all of Helena; Marc Hughes, Kalispell; and Tim Murphy, Missoula.

### 25 Years

Kurt Gelderman, Jon Hayes, Janice Sayles, and Bill Schultz, all of Missoula; Walt Anderson, Vincent Barrett, Greg Mills, Kim Overcast, Arthur Taylor, and Bob Vlahovich, all of Helena; Fred Holmes, Beverly O'Brien, and Richard Russell, all of Kalispell; Scott Compton, Jim Kalitowski, and Jan Mack, all of Bozeman; Bob Larson, Havre and Glasgow; Bob Sandman, Olney; and Sterling Sundheim, Lewistown.

### 20 Years

Dave Roberts and Martin VanCleave, both of Billings; Kathy Arndt, Kevin Chappell, Chuck Dalby, Richard Grady, and Curt Martin, all of Helena; Ray Nelson, Missoula; Kim Read, Kalispell; and Terri Peterson, Havre.

### 15 Years

Norm Fortunate and Kate Kronen, both of Missoula; Jim Domino and Matt Murphy, both of Helena; Deborah Pierce, Bozeman; Ted Mead, Kalispell; Gary Klotz, Shelby; Scott Irvin, Lewistown; Allen Branine, Swan Lake; Teresa Garrison, Plains; and Brian Manning, Olney.

### 10 Years

Arthur Clinch, Robert Fischer, Sonja Hoeglund, and Dave Mousel, all of Helena; Jon Hansen, Bob Harrington, John Pilsworth, and Richard Stocker, all of Missoula; Donna Morken and Tony Nelson, both of Kalispell; Larry Ballantyne, Plains; Kellye Metzenberg, Miles City; Mike Justus, Libby; and Mike McMahon, Olney.

### 5 Years

Charles Atkins, Paul Azevedo, Sharon Borer, Jane Horton, Casey Kellogg, Joyce Naeher, and Tal Williams, all of Helena; Norman Merz and Marc Vessar, both of Kalispell; Pat Cross, Missoula; Michael Dailey, Glasgow; Dave Marsh, Clearwater; and Shawn Morgan, Lewistown.

## —TRUST LAND MERIT AWARDS—

This year, the Division Administrator's Award went to **Norm Kuennen** for his outstanding job of running the Rights-of-Way (ROW) Program for the Northwestern Land Office. In particular, Norm completed an extensive inventory of all Plum Creek ROWs across state-owned land. Norm is stationed in Kalispell.

**John Shotzberger** of the Northwestern Land Office received the Forester of the Year Award for his work in the timber management program. John is part of the Libby Unit and has also contributed to both the Stillwater and Kalispell Units with assistance in timber sale administration and sale layout.

**Randy Dirkson**, of the Glasgow Unit Office, was selected as the 2003 Land Use Specialist of the Year. He was recognized for his lead efforts in processing over 250 historic rights-of-way, his work associated with lease renewal inspections, and his long-term commitment to the proper management of Montana's trust lands.

**Jan Wheeler**, office manager at the Southern Land Office, received the Administrative Support Award for Fiscal Year 2003, which was presented jointly by the Forestry and Trust Land Management Divisions (see "Forestry Awards" section).

Development of the forest management rules was a major accomplishment this year. **Ross Baty, Gary Frank, Brian Long, Scott McLeod, Mike O'Herron, Bruce Rowland,** and **Pete Van Sickle** were recognized for their work on this project.

The Trust Land Management Division also awarded a number of Certificates of Appreciation. Recipients are listed alphabetically below, along with an indication of the work that earned the award.

| | |
|---|---|
| **Lisa Axline** | Rights-of-way and lease documentation for the new Trust Land Management Database |
| **Tommy Butler** | Legal support and representation |
| **Jeanne Holmgren** | Leadership and direction for the Special Use Management Bureau |
| **Bill Miller** | Classroom and computer-based training |
| **Barbara Powell** | Organization and web display of cabin lease properties |
| **Jan Sayles** | Transfer of lease data to the new Trust Land Management Database |

## —TRUST LAND MANAGEMENT SYSTEM—

A new computer system, the Trust Land Management System (TLMS), went into full production in June 2003. The Trust Land Management Division (TLMD) will use TLMS in its management of 5.1 million acres of surface school trust land and 6.3 million acres of subsurface minerals in Montana. Nearly $50 million in school trust revenue will be tracked annually using the system.

Development of the system took over five years, beginning as an objective in the 1998 *DNRC Information Technology Plan*. The 1999 Legislature approved $600,000 in spending authority for TLMS. During 2000, the Information Technology Bureau (ITB) and TLMD staffs worked together to write a request for proposals that specified what DNRC needed the system to do. In 2001, a contract was awarded to a private vendor to develop the system. ITB and TLMD presented training in the use of the system to about 80 department employees in Helena, Billings, Lewistown, Missoula, and Kalispell, and the final subsystems went into production in June 2003.

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TLMS is a comprehensive system that includes all business activity in the Trust Land Management Division. Each of the four TLMD bureaus—Agriculture and Grazing Management, Forest Management, Minerals Management, and Special Use Management—has subsystems designed and developed to meet its specific needs. In addition, TLMS has three shared subsystems for common data: Land Inventory, Cash Management, and Customers.

The new system replaces three older DOS- and mainframe-based systems, providing division-wide querying and reporting functions that were previously unavailable. For example, when the division needs year-end data on trust land revenue, one report can easily be run to supply the data. Land management capabilities exist in the new system, such as a GIS interface with a trust land layer with links to trust land and other relevant data.

DNRC has every right to be very proud of TLMS. A lot of people in the department put in a lot of time working on this project. At a time when many computer system development projects make news as being catastrophic failures, this project was a genuine success.

Photo by Bob Auer

*Training presented by Jeff Dobb*

MONTANA DNRConversation

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